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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/618,030	07/17/2000	Melburn D. Bailey	192397US55X	8593

7590

08/01/2002

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EXAMINER

HWU, DAVIS D

ART UNIT

PAPER NUMBER

3752

DATE MAILED: 08/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/618,030

Applicant(s)

BAILEY, MELBURN D.

Examiner

Davis Hwu

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,9-11 and 13-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5,9 and 10 is/are allowed.
- 6) ☒ Claim(s) 11 and 13-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Respons to Amendment

1. Applicant's amendment of June 26, 2002 is acknowledged and entered as paper number 10 in the case file wrapper.
2. Applicant's cancellation of claim 12 is acknowledged.
3. Applicant's arguments filed June 26, 2002 regarding claim 11 have been fully considered but they are not persuasive. Claim 11 stands rejected as follows.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Crowe.

The patent to Crowe shows a nozzle for a gas torch which can also be considered to be a burner, the nozzle comprising:

- a body having a first end adapted to attached to the burner and a second end (see Figures 1 and 2);
- a first tube comprising sections 12, 11, 9, and 7 extending through the body, the first tube having a first inlet at section 12 on the first end of the body and a first outlet at the end of section 7 on the second end of the body; and
- a second tube comprising sections 6, 5, 4, and 3 extending through the body, the second tube having a second inlet at section 6 on the first end of the body and a second outlet at the end of section 3 on the second end of the body,

wherein the first tube and second tube are separate along a substantial length of the body;

- wherein the first tube includes a first linear section 11 connected to the first inlet and a second linear section 7 connected the first outlet, the second linear section being provided at a predetermined angle in relation to the first linear section (see Figure 2);
- the first tube maintains a constant cross-sectional area over a substantial length thereof and the second tube maintains a constant cross-sectional area over a substantial length (see Figures 2 and 3).

6. Claims 13-16, and 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Singh.

The patent to Singh shows a nozzle 13 for a burner, the nozzle comprising a:

- a body having a first end adapted to attach to the burner and a second end, the first end having a plurality of inlet holes and the second end having a plurality of outlet holes, each inlet hole being connected to a single outlet hole by a separate tube 20 and 21 (see Figure 2), wherein all of the separate tubes in the body extend along a common plane (see Figure 2) and the separate tubes are linear as recited in claim 14 of the instant invention;
- wherein at least one of the separate tubes 17 includes a first linear section connected to one of the inlet holes and a second linear section connected to one of the outlet holes (see Figure 2), the second linear section being

provided at a predetermined angle in relation the first linear section (see Figure 2) as recited in claim 15 of the instant invention.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Singh. Singh discloses the instant invention except for the angles as recited. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the dispersion angles as recited, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art when there is no disclosure as to the criticality of such angles.

Allowable Subject Matter

9. Claims 1-5, 9, and 10 are allowed.

Response to Arguments

10. Applicant's remarks regarding claims 11, 13, and 19 have been fully considered. The patent to Crowe clearly shows that the first tube maintains a constant cross-sectional area over a substantial length thereof as seen in Figures 2 and 3. The patent to Singh discloses the limitations of claims 13 and 19.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Davis Hwu whose telephone number is 703-305-1663. The examiner can normally be reached on M-F 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on (703)308-1946. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7766 for regular communications and (703)308-7766 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0861.



DDH
July 31, 2002